

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCI United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRM APPLICATION NO. FILING DATE 10/617,693 07/14/2003 Frank W. Ratliff 08726.0018.00000 EXAMINER 04/19/2004 Finnegan, Henderson, Farabow, JIANG, CHEN WEN Garrett & Dunner, L.L.P. ART UNIT PAPER NUMBER 1300 I Street, N.W. Washington, DC 20005-3315 3744

DATE MAILED: 04/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
Office Action Summary	10/617,693	RATLIFF, FRANK W.	
	Examiner	Art Unit	
	Chen-Wen Jiang	3744	
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).			
Status			
1) Responsive to communication(s) filed on 14 Ju	<u>ıly 2003</u> .		
2a) This action is <b>FINAL</b> . 2b) This action is non-final.			
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is			
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.	
Disposition of Claims			
4) Claim(s) 1-35 is/are pending in the application.			
4a) Of the above claim(s) is/are withdrawn from consideration.			
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-35</u> is/are rejected.			
7) Claim(s) <u>21</u> is/are objected to.			
8) Claim(s) are subject to restriction and/or election requirement.			
Application Papers			
9) The specification is objected to by the Examine	r.		
10)⊠ The drawing(s) filed on <u>14 July 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).			
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:			
1. Certified copies of the priority documents have been received.			
2. Certified copies of the priority documents have been received in Application No			
3. Copies of the certified copies of the priority documents have been received in this National Stage			
application from the International Bureau (PCT Rule 17.2(a)).			
* See the attached detailed Office action for a list of the certified copies not received.			
A44			
Attachment(s)  1) ☑ Notice of References Cited (PTO-892)	4) 🔲 Interview Summary	(PTO-413)	
2) D Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	ate	
<ol> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date</li> </ol>	5)  Notice of Informal F 6)  Other:	Patent Application (PTO-152)	
S. Patent and Trademark Office			

Application/Control Number: 10/617,693

Art Unit: 3744

#### **DETAILED ACTION**

# **Specification**

- 1. Claim 21 is objected to because of the following informalities: Claim can't depend on itself. Appropriate correction is required.
- 2. The following rejections are based on the best understanding of the claimed limitations.

# Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1,27,28 and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Fineblum (U.S. Patent Number 4,918,937).

Fineblum discloses an air conditioning system with an engine-driven compressor circuit and a thermal compression circuit. Referring to Fig.1, a refrigerant pump 22 and a heat exchanger vapor generator 24 generate high-pressure refrigerant vapor which drives the thermal compressor 10. The system comprises a compressor 10, a connected pulley 30, a magnetic clutch 32, a condenser 12, a receiver-dryer 14, expansion valve 16, evaporator 18 and a suction valve 20. The heat exchanger 24 is located downstream of the liquid pump 24 and the heat exchangers 12,18 are coupled to the compressor 10. Refrigerant pump 22 can be either AC or clutch driven.

Art Unit: 3744

# **Double Patenting**

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

- 6. Claims 1-35 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-24 of U.S. Patent No. 6,418,745. Although the conflicting claims are not identical, they are not patentably distinct from each other because both claim a pump pressuring liquid to a first pressure, a heat exchanger acts as a heat powered refrigerant compressor capable of receiving and transferring external heat to vaporize liquid refrigerant, compressor, condenser and evaporator.
- 7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chen-Wen Jiang whose telephone number is (703) 308-0275. The examiner can normally be reached on Tuesday-Friday from 7:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Denise Esquivel can be reached on (703) 308-2597. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/617,693 Page 4

Art Unit: 3744

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chen-Wen Jiang Primary Examiner